

**Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In The Matter Of

Wireless Broadband Task Force Request for
Comments on Its Report

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GN Docket No. 04-163

REPLY COMMENTS OF QUALCOMM INCORPORATED

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SUMMARY

QUALCOMM Incorporated (“QUALCOMM”) submits these Reply Comments to respond to the Comments filed by the Association of Maximum Service Telecasters, Inc. (“MSTV”) and Microsoft Corporation (“Microsoft”). QUALCOMM continues to believe that the Task Force was correct both in recommending that the Commission clarify its rules to establish streamlined procedures and revised engineering criteria to make it easier for 700 MHz licensees to use their spectrum while the DTV transition proceeds to conclusion and in not recommending that the Commission permit unlicensed use of licensed spectrum.

On the first point, MSTV criticizes what it calls the Task Force’s proposal that “wireless entrants” to the Lower 700 MHz spectrum such as QUALCOMM be given “liberal access to the out-of-core spectrum before conclusion of the digital transition” because the “short term gains to a few 700 MHz entrants would be outweighed by the costs of slowing down the DTV transition and the benefits it would otherwise produce for the public’s television service, interoperable public safety communications, and commercial wireless broadband alternatives.” MSTV Comments at 1, 9 (emphasis in original). This rhetoric distorts the facts.

The parties who MSTV calls “wireless entrants” are licensees who paid for their licenses for the Lower 700 MHz spectrum, which the Commission auctioned in 2002 and 2003. Part 27 of the Commission’s rules permits these licensees to have access to their spectrum, which is part of the so-called out-of-core spectrum, before the end of the DTV transition, whenever that may be. The benefits that will flow when these licensees are able to deploy their new services on the spectrum they paid for are not “short term gains to a few 700 MHz entrants” as MSTV would have it. The benefits will flow not just to a few 700 MHz licensees, but to the American public, who will have access to an array of exciting, innovative, worthwhile new services, such as

QUALCOMM's MediaFLO service, which will bring a new generation of multimedia content to wireless devices. This technology will yield innumerable benefits for the public.

Thus, the issue before the Task Force is not whether the 700 MHz licensees are to have access to their spectrum during the transition or whether such access would benefit the public. Rather, the issue is whether, given that the Commission's rules to facilitate such access are vague, as QUALCOMM showed in its Petition for Declaratory Ruling, the rules should be clarified so the American public can enjoy these innovative wireless broadband services on the Lower 700 MHz spectrum in all markets while the DTV transition proceeds to conclusion. Section 27.60 (b) establishes geographic separation requirements between 700 MHz and TV/DTV stations to permit deployment of wireless services by the 700 MHz licensees during the transition. When the separations cannot be, the rule permits the 700 MHz licensee to show that it can meet a ratio of desired to undesired signals, and the rule also permits a 700 MHz licensee to reach an interference agreement with a TV/DTV station, subject to Commission approval. In many markets, 700 MHz licensees can gain access to their spectrum during the transition using these prongs of the Commission's rule.

In other markets, however, it will not be possible for a 700 MHz licensee to do so, and that is where the problem lies. The rule also contains a catch-all provision that simply says that the 700 MHz licensee can "submit an engineering study justifying the proposed separations. . ."

47 C.F.R. Sec. 27.60 (b) (1) (iii). The rule does not explain what methodology such an engineering study should use to calculate any interference, the criteria that the Commission would use in evaluating such a study, or the procedures that the Commission would follow in processing such studies. The Task Force was right in recommending that this vague rule be clarified so that wireless broadband services can be delivered on the Lower 700 MHz spectrum during the DTV transition in this subset of markets, as QUALCOMM also requested in its

Petition for Declaratory Ruling. All of this hue and cry from MSTV, with their parade of horrors, does not change the fact that the Commission has a vague rule, and the public in these markets will be denied the benefits of new wireless broadband services unless the rule is clarified as QUALCOMM has requested.

The overwhelming bulk of the residents of these markets do not watch over-the-air television and would be completely unaffected by the relief that QUALCOMM has sought. QUALCOMM is simply asking for establishment of the same level of *de minimis* interference that a TV or DTV station can cause today on the very same spectrum to another TV or DTV station, and this *de minimis* interference would end when the transition ends. This relief is fair and in the public interest and will certainly not delay the end of the DTV transition.

Turning to the second point, in sharp contrast to the Lower 700 MHz licensees who have paid for their spectrum in the out-of-core channels and who would cause *de minimis* interference only during the transition, Microsoft asks for free access to the in-core channels in perpetuity via their proposal for unlicensed operations in the so-called vacant TV channels below Channel 52. Microsoft Comments at 4-6. As QUALCOMM explained in its Comments, the Task Force not embrace this proposal.

First, Microsoft is more than able to pay for spectrum. They do not explain why they should be given free access to this prime spectrum, a very valuable public resource. If the spectrum can be used for wireless broadband service, the Commission should auction it, just as the Commission auctions new spectrum to the wireless carriers already providing wireless broadband services.

Second, Microsoft does not explain why they should be given free access to this spectrum at this time, while the DTV stations are in the middle of their channel selection process. The in-core channels are in a state of flux right now, and to introduce unlicensed operations into these

channels now threatens to prolong the channel selection process, which is an important step in completing the DTV transition. To its credit, Microsoft is supporting other efforts to end the DTV transition as quickly as possible, but their suggestion that unlicensed devices operate on the in-core channels while the DTV licensees are in the midst of deciding their elections is counterproductive to those efforts.

QUALCOMM, which itself is involved in developing unlicensed technologies, continues to believe that unlicensed technology is inherently suited for low power, short range operations, and wide area, higher power operations require licensed spectrum. Spectrum below 1 GHz enables superior propagation of radio signals over wide areas, and so this spectrum should be reserved for licensed operations that are inherently designed for wide area service.

Once again, QUALCOMM applauds the Task Force for producing an excellent report, and QUALCOMM would be pleased to provide any additional information to the Task Force to support its efforts.

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REPLY COMMENTS OF QUALCOMM INCORPORATED

QUALCOMM Incorporated (“QUALCOMM”), by its attorney and pursuant to Public Notice, DA 05-610, released March 8, 2005, hereby submits its Reply Comments on the report issued by the Wireless Broadband Access Task Force (the “Task Force”) entitled “Connected on the Go- Broadband Goes Wireless” (the “Report”), which contains the Task Force’s findings and recommendations. In particular, QUALCOMM responds to the Comments filed by the Association of Maximum Service Television, Inc. (“MSTV”) and Microsoft Corporation (“Microsoft”).

I. The Task Force Should Disregard MSTV’s Objection

MSTV objects to the Task Force’s recommendation that the Commission “consider additional mechanisms for allowing 700 MHz channels to be used for wireless broadband services before completion of the DTV transition.” MSTV Comments at 2 (quoting Report at 62-63). MSTV’s Comments only quote the preceding snippet from the Report. The full recommendation is as follows:

the Task Force believes that the Commission should also consider additional mechanisms for allowing 700 MHz channels to be used for wireless broadband services before the completion of the DTV transition. For instance, the Commission could consider ways to make it easier for wireless licensees to make use of the spectrum for wireless broadband services during the transition pursuant to more flexible policies that permit such licensees to use the spectrum so long as such action does not result in undue displacement of television viewers. In this regard, the Commission might consider clarifying or revising this interference criteria, and/or devising a streamlined process by which licensees can establish that their operations comply with the applicable interference criteria or only result in a de minimis impact on viewers.

Report at 62-63.

This recommendation is right on the mark, and nothing in MSTV's Comments should persuade the Task Force to alter the recommendation. MSTV calls the 700 MHz licensees "wireless entrants." MSTV Comments at 1, 2. This choice of words is revealing. The Lower 700 MHz spectrum in question was auctioned by the Commission in 2002 and 2003. The so-called "wireless entrants" hold duly issued license for the spectrum. They are spending money, in the case of QUALCOMM large sums of money, to launch innovative, exciting wireless services on the spectrum for which they have purchased licenses.

MSTV goes on to say that in adopting the 700 MHz service rules, the Commission wrote that the incumbent full power analog and digital TV stations were to be fully protected, but MSTV never quotes the rules that the Commission adopted. The Commission's rules do not say that the TV and DTV stations are to be guaranteed that there will not be any interference. Rather, Section 27.60 says that the 700 MHz base and mobile transmitters are to be operated only in accordance with the Commission's rules "to reduce the potential for interference to public reception of the signals of existing TV and DTV broadcast stations transmitting on TV

Channels 51 through 68.” 47 C.F.R. Sec. 27.60. The rule does not say eliminate all interference or guarantee the absence of all interference. It simply says reduce the potential for interference.

By ignoring the text of the Commission’s rule, MSTV never confronts the issue addressed by the Task Force in its recommendation. The rule establishes four different showings that a 700 MHz licensee can make in order to go on the air in the face of adjacent channel TV or DTV stations, i.e., during the DTV transition: 1) meeting geographic separations set forth in Section 90.309 of the Commission’s rules; 2) meeting certain desired to undesired signal ratios; 3) obtaining the written concurrence of the applicable TV/DTV station; or, 4) “submit(ing) an engineering study justifying the proposed separations based on the actual parameters of the land mobile station and the actual parameters of the TV/DTV station(s) it is trying to protect.” 47 C.F.R. 27.60 (b) (1).

In spite of all of MSTV’s rhetoric about the dire consequences that would flow from “interference from 700 MHz entrants,” the Commission has already decided that the Lower 700 MHz licensees may avail themselves of these four mechanisms for going on the air during the transition. Further, by allowing 700 MHz to reach agreements with the affected TV/DTV stations, subject to Commission approval, the Commission has already decided that some amount of interference is permissible from the Lower 700 MHz licensees to the TV/DTV stations during the DTV transition. What has not been decided, however, are important missing details about the engineering studies that Lower 700 MHz licensees are permitted to file—the methodology that the licensee is permitted to use to calculate the level of interference; whether some level of interference will be considered *de minimis* and therefore acceptable; and, what procedures the Commission staff will use in processing these studies. These are precisely the types of matters for which declaratory rulings are designed.

MSTV never quotes the rule in question and thus never confronts the fact that the rule is vague in these important respects and a declaratory ruling is warranted. Instead, MSTV decries the potential for interference from the “700 MHz entrants,” going so far as to claim that “by interfering with consumers’ ability to receive DTV signals, the operations of 700 MHz entrants would stunt consumers’ ability to receive DTV signals” and slow down the DTV transition. MSTV Comments at 8-9. The Task Force should not credit this argument. QUALCOMM and the other Lower 700 MHz licensees are anxiously waiting for the DTV transition to end so that the spectrum for which they hold licenses will be entirely clear of TV and DTV stations. No one has a greater interest in seeing the transition end as quickly as possible than QUALCOMM and its fellow licensees. But, there is just no basis for the notion that it will slow down the transition for the Commission to clarify its interference rules to enable the Lower 700 MHz licensees to make greater use of the spectrum during the transition. MSTV is simply speculating. QUALCOMM and the other Lower 700 MHz licensees have and will continue to have every reason to want the transition to end as quickly as possible. In its Comments, QUALCOMM stated its support for the Task Force’s recommendation that the Commission work with Congress to enact a hard date for the end of the transition, and QUALCOMM noted that it, TIA, CTIA, and others all support a hard date of December 31, 2006.

As shown *supra*, the Commission’s Part 27 rules already provide four mechanisms by which the Lower 700 MHz licensees are to be able to use their spectrum during the transition. Issuance of a declaratory ruling to clarify the vague provision on engineering studies will not slow down the transition and will permit the American public to have access to innovative wireless broadband services such as MediaFLO. QUALCOMM does not expect the Task Force to decide the details, but the Task Force is right that the public interest would be furthered by

clarification of the rule so that Lower 700 MHz licensees can avail themselves of their legal right to file engineering studies to justify the proposed separations, as Section 27.60 (b) (iii) provides.

For these reasons, the Task Force should not fall victim to the parade of horrors trotted out by MSTV and should stick to the recommendation in the Report.

II. The Task Force Should Not Recommend that the Commission Adopt Microsoft's Proposal That Unlicensed Devices Be Permitted to Operate in the So-Called Vacant TV Bands Below Channel 52

As already noted, QUALCOMM and the other Lower 700 MHz licensees have paid for their spectrum in the out-of-core channels, and under the Part 27 rules, would cause interference to TV/DTV stations only during the transition. By contrast, in its Comments, Microsoft asks for free access to the in-core channels in perpetuity by proposing that unlicensed operations in the so-called vacant TV channels below Channel 52 be allowed. Microsoft Comments at 4-6. As QUALCOMM argued in its Comments, the Task Force not adopt embrace this proposal.

Microsoft is certainly able to pay for spectrum. Microsoft provides no explanation for why it should be given free access to this prime spectrum, a public resource that can be auctioned for large sums of money. If the spectrum can be used for wireless broadband service, QUALCOMM believes that the Commission should auction it, just as the Commission auctions new spectrum to the wireless carriers already who already provide wireless broadband services. It would be fundamentally unfair for the Commission to give Microsoft free access to the TV bands below Channel 52, but to auction access to the TV bands at Channel 52 and above, both for the provision of wireless broadband service, albeit on an unlicensed and licensed basis, respectively.

Similarly, Microsoft provides no explanation for why they should be given free access to this spectrum at this time, while the DTV stations are in the middle of their channel selection

process. The in-core channels are now in flux. To introduce unlicensed operations into these channels now could threaten to prolong the channel selection process, which is an important step in completing the DTV transition. Microsoft is supporting a variety of efforts to end the DTV transition as quickly as possible. However, their suggestion that unlicensed devices operate on the in-core channels while the DTV licensees are in the midst of deciding their elections is counterproductive to those very efforts. Since Microsoft is not a Lower 700 MHz licensee, they do not have the same incentives that the Lower 700 MHz licensees have to see the transition end as quickly as possible.

As QUALCOMM stated in its Comments, QUALCOMM believes that unlicensed technology is inherently suited for low power, short range operations, and wide area, higher power operations require licensed spectrum. Spectrum below 1 GHz enables superior propagation, and so this spectrum should be reserved for licensed operations.

III. Conclusion

QUALCOMM again applauds the Task Force for its excellent report and looks forward to continuing to work with the Task Force, other parts of the Commission, and the Commission itself in the implementation of the Report.

Respectfully submitted,

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